

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**  
**(Attorney Docket No. 15225US01)**

In the Application of:	)	Electronic Filing Date:
	)	
Sherman (Xuemin) Chen	)	July 22, 2008
	)	
Serial No. 10/713,415	)	
	)	
Filed: November 14, 2003	)	
	)	
For: METHOD AND SYSTEM FOR	)	
SECURE KEY GENERATION	)	
	)	
Examiner: Longbit Chai	)	
	)	
Group Art Unit: 2131	)	
	)	
Confirmation No. 2739	)	
	)	

**PRE-APPEAL BRIEF REQUEST FOR REVIEW**

Mail Stop AF  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

This paper responds to the Final Office Action mailed April 22, 2008 ("Final Office Action"), and the Advisory Action mailed July 2, 2008 ("Advisory Action") in the above-identified application. The Applicant respectfully requests review of the final rejection in the above-identified application, in consideration of the following remarks.

This request is being filed with a Notice of Appeal. The review is being requested for the reasons stated on the attached sheets.

### **REMARKS / ARGUMENTS**

#### **I. Sprunk et al. Does Not Anticipate Claims 31 and 45 under §102**

The Applicant maintains that Sprunk et al. does not disclose or suggest at least the limitation of "a mapper" as recited by the Applicant in independent claim 31. The Final Office Action refers to Sprunk, paragraph [0036], FIG. 4, Element 420 and 425. The Applicant points out, however, that there is no suggestion in paragraph [0036] of Sprunk that DES generator 420 is a mapper. DES functionality, however, is not one of mapping input bits. Additionally, the Final Office Action refers to MPEP §2111 and states that the broadest and reasonable claim interpretations must be made . . . [Sprunk] is qualified to provide mapping/scrambling functions to meet the claim limitations as recited in the claim. However, as pointed out above, Sprunk, in the cited paragraph [0036], does not suggest that DES generator 420 is a mapper. Because of the lack of support from Sprunk, the Applicant assumes that the examiner is taking official notice with respect to the "a mapper" as claimed by the Applicant. If this is the case, the Applicant traverses the Final Office Action finding of official notice, and asserts that common knowledge and/or Sprunk do not support a conclusion that a DES generator 420 is a mapper. In accordance with MPEP §2144.03, the Examiner is respectfully requested to provide the explicit basis on which the examiner regards the matter as subject to official notice, and to provide documentary evidence thereto, if the rejection is to be maintained. The Applicant notes, that in the Advisory Action to the above arguments, the Examiner did not address whether official notice was taken.

The Applicant further maintains that Sprunk et al. does not disclose or suggest at least the limitation of "a scrambler coupled to said mapper" as recited by the Applicant. The Final Office Action refers to Sprunk, paragraph [0039], FIG. 4, Element 450, 455 and 456 for support. Paragraph [0039] does not teach or suggest that Elements 450, 455 and 460 are a "scrambler coupled to said mapper." The Applicant points out that the Final Office Action argues that "said mapper" is provided by the elements 420 and 425 of FIG. 4 in Sprunk. The Final Office Action states that "Sprunk teaches double-dual stage DES operation . . . and the DES operation . . . is qualified to provide mapping/scrambling functions." The Applicant notes that the Applicant does not claim a double-dual stage DES in claims 31 or 45, and thus the argument is moot, even under "the broadest and reasonable claim interpretation."

#### **II. Testardi in view of Sprunk does not anticipate independent claims 1, 11, 21, and 35 under §103**

With regard to independent claim 1, the Applicant submits that Testardi does not disclose "a method for producing a secure key," as claimed in the Office

Action. Testardi, col. 6, lines 29-31 does not provide any support for "secure key." Furthermore, the Final Office Action is citing Testardi, column 6, lines 49-51 to show support for "*producing* a secure key," as stated by the Applicant. However, as the Final Office Action states, Testardi describes "once an electronic key is *received* and authenticated, the premium functionality is permanently enabled." The Applicant notes that Testardi indeed describes receiving a key, and not producing a key. Furthermore, the Applicant does not claim "enabling premium functionality." Thus, the cited passage from Testardi does not provide any support for "producing a secure key."

The Applicant respectfully submits that Testardi in view of Sprunk does not teach or suggest the Applicant's claim limitation: generating a first output key based on said at least said first input key, said second input key and said third input key, wherein said first output key is unique and differs from said at least said first input key and said third input key is a key variation comprising a device identity.

The Final Office Action relies for support on Testardi col. 6, line 29-31, and col. 4, line 60-65, and on Sprunk, FIG 4 and paragraph [0036] for the underlined portions of the Applicant's claim. In contrast, the Advisory Action refers to Sprunk for support of "generating a first output key based on said at least said first input key, said second input key and said third input key." Yet, in the Final Office Action, it is not stated how Sprunk provides support for "generating a first output key based on said at least said first input key, said second input key and said third input key." Instead, it is suggested that Sprunk supports "receiving" input keys. Moreover, the Final Office Action states that the obviousness rejection is based on combining: a) Testardi teaches a method for generating a security key for a printer device . . . and b) Sprunk teaches an enhanced mechanism for generating a cryptographic key to maintain a high level of security against hostile attackers by using multiple security input key variations.

Thus, it is unclear which reference provides support for what, and how, or even why they are combined. This is highly confusing, and for this reason alone the combination of Testardi and Sprunk is not obvious. According to the Advisory Action, Sprunk supports "generating a first output key based on said at least said first input key, said second input key and said third input key" and NOT (emphasis in Advisory Action, p. 2, middle of the page) Testardi. Yet, in a) above, it is stated that Testardi teaches a method for generating a security key, and the Advisory Action states (p.2, end of Section 2) "Testardi does teach generating a security key is indeed used for a printer device." Further confusing issues, the Final Office Action relies on Testardi, column 6, lines 29-31 to support a) above. However, Testardi, column 6, lines 29-31 does not support statement a) above. Thus, because the statement a) above is not actually supported by Testardi, the combination of a) and b) above must necessarily fail, for lack of support.

In the Advisory Action, the Examiner takes issue with the above argument stating that "one cannot show nonobviousness by attacking references individually, where the rejection is based on combinations of references," in accordance with MPEP §2145 (IV). The Applicant asserts that the Applicant is not rebutting Testardi individually, but has shown that there is no support for the Applicants claim limitation in either Testardi or Sprunk individually, or combined.

In the Advisory Action, it is further stated that "Testardi teaches a electronic security key which is correlated with an unique serial number is used to enable the printer's premium functionality," citing Testardi, col. 8, line 18-25, and Testardi, col. 6, line 29-31, and lines 49-51. The Applicant notes this statement is without relation to the Applicant's claim limitations: The Applicant does not claim "correlate ", "serial number", "printer," and/or "premium functionality." Thus, the issue of whether there is support for the above statement from the Final Office Action, and the Advisory Action, is moot. Moreover, as outlined above, "correlated with a unique serial number is used to enable the printer's premium functionality" does not support a). The Applicant respectfully requests that the rejection is withdrawn.

The Applicant respectfully asserts that neither Testardi nor Sprunk suggest the combination of points a) and b) as recited in the Office Action. Instead, Office Action relies on an ordinary-person standard to establish obviousness. "[R]ejections on obviousness cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness." MPEP §2143.01(IV).

Hence, the Applicant believes to have overcome the rejection to claim 1 for at least the reasons provided above. Because the Office Action does not establish a prima facie conclusion of obviousness, the Applicant respectfully requests that claim 1 be made allowable. Independent claims 11, 21, and 35 are similar to claim 1 and the above arguments may be applied. Hence, the Applicant respectfully requests that independent claims 11, 21, and 35 are made allowable also. The Applicant also reserves the right to argue additional reasons beyond those set forth above to support the allowability of claims 1, 11, 21 and 35. Dependent claims 2, 6, 10, 12, 16, 20, 22, 26, 30, 36, 40, and 44 depend on independent claims 1, 11, 21, and 35. Since the Applicant believes to have overcome the rejection under 35 U.S.C. §103 of independent claims 1, 11, 21, and 35, the Applicant respectfully requests that the dependent claims 2, 6, 10, 12, 16, 20, 22, 26, 30, 36, 40, and 44 are made allowable. The Applicant also reserves the right to argue additional reasons beyond those set forth above to support the allowability of claims 2, 6, 10, 12, 16, 20, 22, 26, 30, 36, 40, and 44.

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### **CONCLUSION**

Based on at least the foregoing, the Applicant believes that all claims 1-48 are in condition for allowance. If the Examiner disagrees, the Applicant respectfully requests a telephone interview, and request that the Examiner telephone the undersigned Attorney at (312) 775-8105.

The Commissioner is hereby authorized to charge any additional fees or credit any overpayment to the deposit account of McAndrews, Held & Malloy, Ltd., Account No. 13-0017.

A Notice of Allowability is courteously solicited.

Respectfully submitted,

Date: July 22, 2008

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